IN THE CLAIMS:

Claims 1, 4-7, 10, and 12 have been amended as follows:

1. (Currently Amended) An integrated heat spreader constructed and arranged to be adhesively affixed, with a sealant, to at least a portion of a component, comprising:

a body portion;

a solid continuous lip portion substantially vertically oriented relative to the body portion; and

a <u>plurality of step</u> portions adjacent to the lip portion, wherein <u>the plurality of step</u> portions are spaced apart by a <u>plurality of cutouts</u> the step portion has a <u>plurality of cutouts</u> or a <u>plurality of holes or bores therein</u>.

- 2. (Canceled)
- 3. (Canceled)
- 4. (Currently Amended) The integrated heat spreader of claim 1, wherein the plurality of step portions are non-uniformly spaced is irregularly shaped.
- 5. (Currently Amended) The integrated heat spreader of claim 1, wherein the plurality of step portions is are formed of copper or aluminum.
- 6. (Currently Amended) The integrated heat spreader of claim 1, wherein the plurality of step portions is are formed of a carbon/carbon composite.
- 7. (Currently Amended) The integrated heat spreader of claim 1, wherein the <u>plurality of step portions is are formed of a carbon/metal composite.</u>

- 8. (Original) The integrated heat spreader of claim 7, wherein the carbon/metal composite comprises a matrix fiber reinforced composite.
- 9. (Original) The integrated heat spreader of claim 7, wherein the carbon/metal composite comprises a carbon/copper composite.
- 10. (Currently Amended) The integrated heat spreader of claim 1, further comprising a coating applied to the <u>plurality of step portions</u>.
- 11. (Original) The integrated heat spreader of claim 10, wherein the coating comprises nickel.
- 12. (Currently Amended) The integrated heat spreader of claim 1, further comprising a plated portion integrally formed with the <u>plurality of step portions</u>.
- 13. (Original) The integrated heat spreader of claim 12, wherein the plated portion is formed of gold,\silver, tin, nickel, or a metal composite.
- 14. (Original) The integrated heat spreader of claim 1, wherein the sealant is silicone-based or epoxy-based.
- 15. (Original) The integrated heat spreader of claim 1, wherein the component comprises a substrate.
- 16. (Original) The integrated heat spreader of claim 1, wherein the body portion comprises a substantially rectangular or square frame.
- 17. (Original) The integrated heat spreader of claim 1, further comprising a thermal interface material (TIM) interposing a die and the body portion, the TIM comprising one of solder, a polymer/solder composite, and a polymer.



18 – 25\(Canceled in February 7, 2003 Amendment)

/// ///

111

111

111

111

111

///

///

111

///

111

111

///

111

111

111

111